

REMARKS

Applicants have considered the outstanding official action. It is respectfully submitted that the claims are directed to patentable subject matter as set forth below.

The Examiner has required restriction under 35 U.S.C. §121 and §372. Applicants confirm the election to prosecute in the present application the claims of Group I, i.e., claims 16-26. Applicants reserve the right to file a divisional application(s) on the non-elected subject matter of claims 27-32.

The drawings are objected to because the differences between what "D" and "L" in Figure 6 denote is not clear in the drawings. Applicants note that "D" indicates the width of a bridge "P" and "L" indicates the length of a bridge "P". Applicants further note that "D" and "L" are described in the specification at page 3, last paragraph; page 4, second paragraph; page 10, last paragraph, and page 11, first full paragraph. In view of the adequacy of the description, applicants have amended the drawings to simply delete "D" and "L" from Figure 6. The

proposed amended Figure 6 is attached. Acceptance of amended Figure 6 is requested.

Applicants have amended the title to read "Absorbent Embossed Paper Sheet".

The outstanding rejections are as follows:

- (1) Claims 16-26 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) over EP 1 101 867 A1 (Graff), which is equivalent to U.S. Patent No. 6,461,720 B1 or FR 2773564 A1 (Roussel), which is equivalent to U.S. Patent No. 6,254,683;
- (2) Claims 16-21 and 24-26 under 35 U.S.C. §102(b) as anticipated by, or in the alternative, under 35 U.S.C. §103(a) over U.S. Patent No. 2,177,490 (Kieffer); and
- (3) Claims 22-23 and 25 under 35 U.S.C. §103(a) as being unpatentable over Kieffer.

Claim 16 is the sole pending independent claim. Claim 16 is directed to a sheet of tissue paper including at least one first embossed zone and at least one unembossed zone. The first embossed zone includes two arrays having protrusions on one side corresponding to alveoles on an opposite side. The alveoles have substantially polygonal

bases and are configured along at least one array. Mutually facing sides of two adjacent alveoles subtend a bridge having rectilinear or substantially rectilinear edges of a length greater than a maximum width of the bridge. At least one bridge is connected to another bridge.

With respect to the rejection based on either Graff or Roussel, while each of Graff and Roussel teach that the shape of the protuberances described therein can be polygonal, oval or circular, neither of Graff nor Roussel teach or suggest any kind of bridge which mutually faces sides of two adjacent alveoles, in particular wherein (1) the length of the bridge is greater than a maximum width of the bridge and (2) at least one bridge is connected to another bridge. The Examiner while acknowledging that Graff and Roussel do not explicitly teach the bridge and edge distance as claimed, that due to the pattern resemblance of the applied art such would be considered a minor modification and obvious to one skilled in the art absent a showing of unexpected results.

Applicants respectfully submit that the differences between the claimed sheet of paper and the teachings of the applied art are not minor or obvious modifications as shown by the unexpected results of the

comparative tests set forth in the captioned application at pages 13-19. The tests compared conventional products without bridges with products including bridges according to the claimed invention. The claimed paper sheet has improved properties over paper of a conventional structure. For example, in the first test, as shown by the results in the Table at page 16, the product according to the invention has improved absorptive properties. The inventive samples M1 and N1 absorb more than the conventional sample L1, which includes a pattern with circular bases. The second test shows that liquid in the inventive examples M and N diffuses more efficiently in all directions, i.e., transverse and machine direction, as compared to conventional product L. In the third test, as illustrated in Figure 9, the absorption rate of liquids applied to a surface is greater for products in accordance with the invention.

Accordingly, applicants have shown in the tests described in the specification that products having a bridge structure as claimed unexpectedly have improved liquid absorption and diffusion properties over products with conventional patterns. Therefore, applicants submit that the paper sheet is not anticipated or rendered obvious within the meaning of 35 U.S.C. §102 and §103, respectively.

Withdrawal of the §102 and §103 rejections based on, alternatively, Graff or Roussel is requested.

As to the rejections based on Kieffer, applicants initially note that tissue paper in the sense of the present invention did not exist in 1936, the time at which the application leading to the patent of Kieffer was filed. Further, applicants' claimed bridge feature is not taught or suggested by Kieffer. Kieffer teaches alveoles which are joined at their bases and, thus, no bridges as claimed are or can be present. Further, no suggestion to modify the structure of Kieffer is present since the objective of Kieffer is to create indented paper having a reduced probability to nest when wound upon itself or when superposed on another sheet or web, see page 1, column 1, lines 52-55 and page 1, column 2, lines 26-31.

Additionally, since Kieffer does not teach or suggest the structure of the base claim, applicants submit that the limitations of the claims dependent thereon are also not taught or suggested.

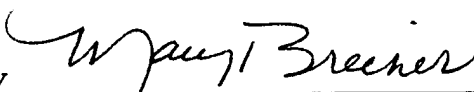
Accordingly, Kieffer does not anticipate or render obvious the claimed paper sheet within the meaning of 35 U.S.C. §102 or §103. Withdrawal of the §102 and §103 rejections based on Kieffer is respectfully requested.

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Reconsideration and allowance of the claims is
respectfully requested.

Respectfully submitted,

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Attachment - Replacement Drawing Sheet (Figure 6)